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| EXAMINER |
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CEHIC, KENAN

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| ART UNIT | PAPER NUMBER |
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2416

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04/17/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tammy@ppglaw.com

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/534,346 | Applicant(s) SPENCER, ANTHONY | |
| | Examiner KENAN CEHIC | Art Unit 2416 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19,21-39 and 42-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19,21-39 and 42-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-19, 21-39, 42-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claim 1, and similarly claims 22, 42, 43-45, 47, the applicant does not specifically point out where newly amended claims are supported in the original specification, as required by MPEP 2163 and 37 CFR 1.111 and further the examiner fails to see support for newly amended claim limitations for the above claims. Specifically, the original specification fails to disclose for the above claims, where packet records are stored and arranged (using a queue) for output in a exit order (the exit order of packets) nor where packets or data portions are being output in accordance with packet records being output from the queuing means. Dependent claims are rejected based on their dependence.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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2. Claims 37-39 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 37-39 there is not antecedent basis for "said processor elements".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1, 2, 5, 8, 11, 22, 23, 26, 27, 32, 42-45, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887) in view of Brunheroto et al (US 6,643,298)

For claim 1 and similarly 22, 42, 43-45, 47 Sindhu discloses A sorting incoming data packets (see fig. 5; 70; col 7 line 55 through col 8 line 15 "receives data packets...divides the packets into cells...writes them to memory system"), the system comprising assignment means (see fig 5; 59; fig. 6, 85; fig. 7; 78; fig. 8; 94), operable only on packet

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records containing information about said packets, for assigning an exit order to said packets (see col 6 lines 35-50 "data cell includes a header portion...: col 9 line 10-40 "Packets received by the line card include a packet header...includes source and destination addresses...length....each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels"; col 10 line 10-50 "plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can be transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory") ; queue means (see figs. 6, 88; fig. 9; 104; col 9 lines 10-35 "header queues...for storing packet header information") responsive to said assignment means (see fig 5; 59; fig. 6, 85; fig. 8; 94) for storing and arranging queuing said packet records sorted packets for output in said exit order see col 6 lines 35-50 "data cell includes a header portion...: col 9 line 10-40 "Packets received by the line card include a packet header...includes source and destination addresses...length....each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels"; col 10 line 10-50 "plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can be transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory");, and memory means for storing said packets or data portions (see fig. 5; 76; col 7 line 55 through col 8 line 15 "receives data packets...divides the packets into cells...writes them

to memory system 76”) thereof wherein said data portions being output from the memory means in accordance with the corresponding packet records being output from the queue means (see col 10 lines 10-50 “identifies an appropriate header queue 104 to obtain the address of the next data cell stored in memory...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can the transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory”)

For claim 2 and similarly 23 , Sindhu discloses assignment means (see fig 5; 59; fig. 6, 85; fig. 7; 78; fig. 8; 94) is responsive to information contained within a packet whereby to determine an exit order number for that packet (see col 6 lines 35-50 “data cell includes a header portion...: col 9 line 10-40 “Packets received by the line card include a packet header...includes source and destination addresses...length...each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels”; col 10 line 10-50 “plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can the transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory”)

For claim 5 and similarly 26, Sindhu discloses assignment means (see fig 5; 59; fig. 6, 85; fig. 7; 78; fig. 8; 94) is adapted to insert sorted packet records in said queue means in exit order (see col 6 lines 35-50 “data cell includes a header portion...: col 9 line 10-40 “Packets received by the line card include a packet header...includes source and

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destination addresses...length....each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels”; col 10 line 10-50 “plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can be transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory”)

For claim 6 and similarly 27, Sindhu discloses wherein said queue means comprises a queue manager adapted to insert packets packet records into said queue means in exit order col 10 line 10-50 “plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can be transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory”).

For claim 11 and similarly 32, Sindhu discloses assignment means comprises a processor (see fig 5; 59; fig. 6, 85; fig. 7; 78; fig. 8; 94)

For claims 42, and 44 A computer system (see figs 1-7; col 19-20 “programmed..programming...software”).

For claim 43, and 45 a network processing system (see figs. 1-6)

For claim 47, A computer readable medium containing instructions (see figs 1-7; col 19-20 “programmed..programming...software”).

Sindhu does not explicitly disclose:

For claim 1 and similarly 22, 42, 43-45, 47, processing in real time

Brunheroto from the same or similar field of endeavor discloses the following features:

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For claim 1 and similarly 22, 42, 43-45, 47, Brunheroto discloses processing in real time (see col 7 line 15-40 "real-time engine...packet header..."; col 6 lines 1-15 "real-time access" ; col 2 line 54 through 3 line 20 "real-time processing...real-time support")

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu by using the above recited features, as taught by Brunheroto, in order to provide real-time processing of packets / headers in order to expedite and minimize delay when processing packets / headers in order to accommodate time critical data (see Brunheroto see col 2)

4. Claims 3, 17-19, 24, 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887) in view of Brunheroto et al (US 6,643,298) as applied to claim 1 above, and further in view of De Silva et al. (US 7,499,456)

For claim 3, 17-19, 24, 37-39, Sindhu and Brunheroto discloses the claimed invention as described above.

For claim 3, 17-19, 24, 37-39 assignment means is responsive to whereby to determine an exit order number for that packet packets (see col 6 lines 35-50 "data cell includes a header portion...: col 9 line 10-40 "Packets received by the line card include a packet header...includes source and destination addresses...length....each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels"; col 10 line 10-50 "plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can the

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transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory").

For claim 3, 17-19, 24, 37-39 ,for assigning said exit order to sorting said packets packets (see col 6 lines 35-50 "data cell includes a header portion...: col 9 line 10-40 "Packets received by the line card include a packet header...includes source and destination addresses...length...each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels"; col 10 line 10-50 "plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can the transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory")

Sindhu and Brunheroto are silent about:

For claim 3 and similarly 24, information contained in a table

For claim 17 and similarly 37, comprising tables of information, wherein said tables are stored locally to said processor (elements)

For claim 18 and similarly 38, said tables are for the same class of service on each-said processor (elements)

For claim 19 and similarly 39, wherein said tables are for different varying classes of service on said processor (elements)

De Silva from the same or similar field of endeavor discloses the following features:

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For claim 3 and similarly 24, De Silva discloses information contained in a table (see fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

For claim 17 and similarly 37, De Silva discloses comprising tables of information, wherein said tables are stored locally to said processor (elements) (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

For claim 18 and similarly 38, De Silva discloses said tables are for the same class of service on each-said processor (elements) (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

For claim 19 and similarly 39, De Silva discloses wherein said tables are for different varying classes of service on said processor (elements) (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu and Brunheroto by using the above recited features, as taught by De Silva, in order to provide a method which does not result in forwarding errors thus increasing efficiency of the network (see De Silva col 4.)

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5. Claims 4, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887) in view of Brunheroto et al (US 6,643,298) as applied to claim 1 above, and further in view of Yazaki et al. (US 2005/0163049)

For claim 4, 21, 25, Sindhu and Brunheroto discloses the claimed invention as described above.

Sindhu and Brunheroto are silent about:

For claim 4 and similarly 25, assignment means is responsive to information associated with a data packet stream in which said packet is located whereby to determine an exit order number for that packet.

For claim 21, assignment means implements algorithms for packet scheduling in accordance with predetermined criteria, including other prioritisation and sorting.

Yazaki from the same or similar field of endeavor discloses the following features:

For claim 4 and similarly 25, Yazaki assignment means is responsive to information associated with a data packet stream in which said packet is located whereby to determine an exit order number for that packet (see claim 2 priority of the packet based on the flow identifier...buffer stores packets in order of priority”; section 0046 “each incoming packet...flow...packets”).

For claim 21, assignment means implements algorithms for packet scheduling in accordance with predetermined criteria, including other prioritisation and sorting (see claim 2 priority of the packet based on the flow identifier...buffer stores packets in order of priority”; section 0046 “each incoming packet...flow...packets”).

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It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu and Brunheroto by using the above recited features, as taught by Yazaki, in order to provide high-speed traffic shaping and to make efficient use of minimum bandwidth (see Yazaki sections 0004-12)

6. Claims 6-7, 28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887) in view of Brunheroto et al (US 6,643,298) as applied to claim 1 above, and further in view of Kiremdjian et al. (US 2003/0081623)

For claim 6-7, 28, 29, Sindhu and Brunheroto discloses the claimed invention as described above.

Sindhu and Brunheroto are silent about:

For claim 6 and 28, wherein said queue means is a single queue.

For claim 7 and 29, wherein said single queue provides a plurality of virtual queues.

Kiremdjian from the same or similar field of endeavor discloses the following features:

For claim 6 and 28, Kiremdjian discloses wherein said queue means is a single queue (see fig. 2a; section 0023 “single queue”).

For claim 7 and 29, Kiremdjian discloses wherein said single queue provides a plurality of virtual queues (see fig. 2a; section 0023 “single queue”; section 0035-42 “virtual...several entries.; see title).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu and Brunheroto by using the above recited features, as taught by Kiremdjian, in order to provide a traffic-shaping cell that

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can control network bandwidth at very high datapacket rates and in real time, while preventing out-of order deliver (see Kiremdjian sections 0005-15)

7. Claims 9-10, 30, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887) in view of Brunheroto et al (US 6,643,298) as applied to claim 1 above, and further in view of Donis et al. (US 2002/0075882)

For claims 9, 10, 30, 31 Sindhu and Brunheroto discloses the claimed invention as described above.

For claims 9, 10, 30, 31, Sindhu discloses the packet records packets (see col 6 lines 35-50 "data cell includes a header portion...: col 9 line 10-40 "Packets received by the line card include a packet header...includes source and destination addresses...length....each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels"; col 10 line 10-50 "plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can the transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory")

Sindhu and Brunheroto are silent about:

Regarding claim 9, and similarly 30 means to drop certain data before being output from said queue means.

Regarding claim 10, and similarly 31 dropping certain data before being queued in said queue means.

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Donis from the same or similar field of endeavor discloses the following features:

Regarding claim 9, and similarly 30 Donis discloses means to drop certain data before being output from said queue means (fig. 6, ¶0042, wherein dropping the cell at step 64 corresponds to dropping certain packets before being queued in said queue means).

Regarding claim 10, and similarly 31 Donis discloses dropping certain data before being queued in said queue means (fig. 6, ¶0042, wherein dropping the cell at step 64 corresponds to dropping certain packets before being queued in said queue means).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu and Brunheroto by using the above recited features, as taught by Donis, in order to provide a method a priority scheme where different data types are treated differently in the network in order to satisfy the particular QoS of the data type (see Donis sections 0003-13)

8. Claims 12-16, 33-36, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887) in view of Brunheroto et al (US 6,643,298) as applied to claim 1 above, and further in view of Wilkinson et al. (US 6,094,715)

For claim 12-16, 33-36, 46, Sindhu and Brunheroto discloses the claimed invention as described above.

Sindhu and Brunheroto are silent about:

For claim 12 and similarly 33, wherein said processor comprises a parallel processor.

For claim 13 and similarly 34, wherein said parallel processor is an array processor comprising one array of processor elements.

For claim 14 and similarly 35, wherein said array processor is a SIMD processor.

For claim 15, further comprising means to provide access for said parallel processor to shared state.

For claim 16 and similarly 36, further comprising a state engine to control said access to said shared state.

For claim 46, silicon integrated circuits.

Wilkinson from the same or similar field of endeavor discloses the following features:

For claim 12 and similarly 33, Wilkinson discloses wherein said processor comprises a parallel processor (see col 3 lines 15-55 “Array...SIMD...array processor...array processor”; col 13 line 35 “parallel array processor...SIMD...”).

For claim 13 and similarly 34, Wilkinson discloses wherein said parallel processor is an array processor comprising one array of processor elements processor (see col 3 lines 15-55 “Array...SIMD...array processor...array processor”; col 13 line 35 “parallel array processor...SIMD...”).

For claim 14 and similarly 35, Wilkinson discloses wherein said array processor is a SIMD processor (see col 3 lines 15-55 “Array...SIMD...array processor...array processor”; col 13 line 35 “parallel array processor...SIMD...”; col 27 line 35-50 “state of interrupt mask...SIMD”).

For claim 15, Wilkinson discloses further comprising means to provide access for said parallel processor to shared state (col. 25, lines 14-67, wherein the individual PME memory can be divided into local and shared global areas programmatically corresponds to providing access for parallel processors to shared state; col 42 line 20-35 “single CC

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can be shared...”; col 47 line 10-35 “elements ...share common indexing, addressing...”).

For claim 16 and similarly 36, Wilkinson discloses further comprising a state engine to control said access to said shared state. (col. 25, lines 14-67, wherein the specialized controls permitting task switching and retention of program state information at each of the PMEs interrupt execution levels correspond to state engine to control access to shared state; col 27 line 35-50 “state of interrupt mask...SIMD”).

For claim 46, silicon integrated circuits (see col 3 lines 15-55 “Array...SIMD...array processor...array processor”; col 13 line 35 “parallel array processor...SIMD...”; col 27 line 35-50 “state of interrupt mask...SIMD” Official notice I taken that processors can / are made by silicon).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu and Brunheroto by using the above recited features, as taught by Wilkinson, in order to provide large parallel processor and computer systems which can handle great amount of data / processes at the same time (see Wilkinson col 11)

9. Claims 48-55 rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu et al. (US 7,342,887), Brunheroto et al (US 6,643,298), and Wilkinson et al. (US 6,094,715) as applied to claim 13/34 above, and further in view of De Silva et al. (US 7,499,456)

For claims 48-50, 52-54, Sindhu, Wilkinson and Brunheroto discloses the claimed invention as described above.

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For claim 48-50, 52-54, Sindhu discloses sorting said packet records (see col 6 lines 35-50 “data cell includes a header portion...: col 9 line 10-40 “Packets received by the line card include a packet header...includes source and destination addresses...length....each header may include priority data defining a priority level associated with the corresponding packet...give preference to packets with higher priority levels”; col 10 line 10-50 “plurality of header queues...sends the packet headers to header queues...cells from a data packet having a very high priority may be loaded into the top of its associated header queue...can be transferred through the switch fabric quickly and without waiting for ...when the cells arrived in system memory”)

For claim 48,49,52,53, Brunheroto discloses each processor element of said parallel processor (see col 3 lines 15-55 “Array...SIMD...array processor...array processor”; col 13 line 35 “parallel array processor...SIMD...”; col 27 line 35-50 “state of interrupt mask...SIMD”); information stored locally (see col 25 line 10-67 “PME memory...local and shared “).

For claim 50, 54, Brunheroto discloses different processor elements of said parallel processor(see col 3 lines 15-55 “Array...SIMD...array processor...array processor”; col 13 line 35 “parallel array processor...SIMD...”; col 27 line 35-50 “state of interrupt mask...SIMD”).

For claim 51, 55, Brunheroto discloses wherein said processor elements share information from information/state, such that:

(a) the information held in information/state in one processor element is accessible by other processing element(s) of said parallel processor (col. 25, lines 10-67, wherein the

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specialized controls permitting task switching and retention of program state information at each of the PMEs interrupt execution levels correspond to state engine to control access to shared state; col 27 line 35-50 “state of interrupt mask...SIMD”).

; and (b) processor elements have access to other processor elements in said parallel processor, whereby processor elements can perform on behalf of other processor elements of said parallel processor (col. 25, lines 10-67, wherein the specialized controls permitting task switching and retention of program state information at each of the PMEs interrupt execution levels correspond to state engine to control access to shared state; col 27 line 35-50 “state of interrupt mask...SIMD”).

Sindhu, Wilkinson and Brunheroto are silent about:

For claim 48 and similarly 52, further comprising tables of information wherein said tables are stored locally

For claim 49 and similarly 53, wherein said tables are for the same class of service

For claim 50 and similarly 54, wherein said tables are for varying classes of service

For claim 51 and 55, respective tables, perform table lookups

De Silva from the same or similar field of endeavor discloses the following features:

For claim 48 and similarly 52, De Silva discloses further comprising tables of information wherein said tables are stored locally (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

For claim 49 and similarly 52, De Silva discloses wherein said tables are for the same class of service (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

For claim 50 and similarly 52, De Silva discloses wherein said tables are for varying classes of service (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

For claim 51 and 55, De Silva discloses respective tables, perform table lookups (see fig. 3; fig. 4 ;40c, 406; fig. 8; 800a, 808; fig. 5 see col 5 lines 1-40 “on or more CoS mapping tables...identified CoS mapping table...”)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify / combine the features of Sindhu, Wilkinson and Brunheroto by using the above recited features, as taught by De Silva, in order to provide a method which does not result in forwarding errors thus increasing efficiency of the network (see De Silva col 4.)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENAN CEHIC whose telephone number is (571)270-3120. The examiner can normally be reached on Monday through Friday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KWANG BIN YAO can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenan Cehic/
Examiner, Art Unit 2416